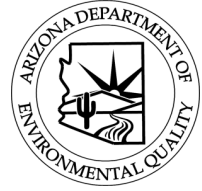




Jane Dee Hull  
Governor

# ARIZONA DEPARTMENT OF ENVIRONMENTAL QUALITY

1110 West Washington Street • Phoenix, Arizona 85007  
(602) 771-2300 • [www.adeq.state.az.us](http://www.adeq.state.az.us)



Richard W. Tobin II  
Acting Director

Re: Cost Ceilings/Guidelines

Dear Interested Party:

Enclosed please find a complete set of cost ceilings/guidelines for your use in preparing the State Assurance Fund application. Remember, only the State Assurance Fund application with a revision date of September, 2000 will be accepted. All other applications will be returned.

Thank you for your interest in our department.

Sincerely,

Judy Navarrete  
State Assurance Fund Manager

Enclosures

Northern Regional Office  
1515 East Cedar Avenue • Suite F • Flagstaff, AZ 86004  
(928) 779-0313

Southern Regional Office  
400 West Congress Street • Suite 433 • Tucson, AZ 85701  
(520) 628-6733

## II

### ADEQ Approved Cost and Procedural Guidelines

The Technical Review staff uses the following guidelines and procedures to review the reasonableness of the costs charged for site characteristics and corrective action of the LUST sites.

#### Consultant Guidelines For UST Projects

<u>Cost Category</u>	<u>Cost Guidelines</u>
Principal	\$100 per hour
Senior Level Professional	\$100 per hour
Staff Level Professional	\$75 per hour
Field Level Personnel	\$55 per hour
Administration/Secretarial	\$45 per hour
Technician Personnel (CADD, Map Production, etc.)	\$55 per hour

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The above guidelines represent the upper portion of a reasonable range for prices and units. These guidelines may be exceeded if the individual facts surrounding an application warrant this decision.

## **SUBCONTRACTOR GUIDELINES FOR UST PROJECTS**

<b><u>Cost Category</u></b>	<b><u>Cost Guidelines</u></b>
Skilled Labor	\$40 per hour
Excavation and Haul (contaminated soil)	\$25 per ton (up to and including 125 miles)
Backfilling (material, equipment, compact, hauling, compaction, labor )	\$25 per ton
Landfill Disposal (contaminated soil)	\$60 per ton
Incineration (Contaminated soil) On-site (includes labor)	\$60 per ton Mob/Demob \$2,500 (includes one-way travel 125 miles)
Off-site (includes waste characterization but not hauling)	\$85 per ton
Mileage (includes passenger, pickup, truck and utility vehicles)	\$0.50
Subcontractor Markup	20 percent

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The above guidelines represent the upper portion of a reasonable range for prices and units. These guidelines may be exceeded if the individual facts surrounding an application warrant this decision.

## **Analytical Guidelines for UST Projects**

<b><u>Cost Category</u></b>	<b><u>Cost Guidelines</u></b>
TPH by BLS-181(rush Analysis =100 Percent surcharge)	\$60
BTEX by EPA 8020 (rush Analysis = 100 percent surcharge)	\$100
BTEX by EPA 8020 (air samples)	\$120
Water samples by EPA502.2 Target compounds including BTEX (rush analysis = 100 percent surcharge)	\$250
BTEX in water samples by EPA Method 503.1 or 502.2 ( rush analysis =100 percent surcharge)	\$110
Lead by EPA Method 6010	\$40

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The above guidelines represent the upper portion of a reasonable range for prices and units. These guidelines may be exceeded if the individual facts surrounding an application warrant this decision

## **Drilling Guidelines for UST Projects**

<b><u>Cost Category</u></b>	<b><u>Cost Guidelines</u></b>
Monitor well installation by Auger Rig	
2-inch diameter MW	\$25 per foot
4-inch diameter MW	\$35 per foot
(40 to 140 feet deep)	Mob/Demob \$500 (includes one-way travel of 125 miles)
Monitor Well Installation by Air Rotary Rig	
4-inch diameter MW	\$60 per foot
6-inch diameter MW	\$70 per foot
	Mob/Demob \$700 (includes one-way travel of 125 miles)
Monitor Well Installation by Becker Rig	
4-inch diameter MW	\$80 per foot
6-inch diameter MW	\$90 per foot
	Mob/Demob \$1,200 (includes one-way travel of 125 miles)
Soil Borings	\$20 per foot
Drill rig and crew	\$185 per hour (includes auger and air rotary rigs) \$300 per hour (Becker Rig)
Well Abandonment	
4-inch MW	\$8 per foot
6-inch MW	\$12 per foot
Soil Boring - Grouting, Patch	\$5 per foot

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The above guidelines represent the upper portion of a reasonable range for prices and units. These guidelines may be exceeded if the individual facts surrounding an application warrant this decision.

The technician review staff uses the following authorized tasks by labor category as a guide in finding the “reasonableness of costs” according to industry standards. Tasks done by personnel exceeding the authorized labor category may be determined reasonable following further evaluation and explanation.

## **Personnel Task Description**

<b><u>Labor Category</u></b>	<b><u>Authorized Tasks</u></b>
Principal	<ul style="list-style-type: none"><li>* Directs professional staff.</li><li>* Serve as technical expert or coordinator of large or technically challenging projects.</li><li>* Provide final review of project documents that legally bind the company.</li><li>* Negotiate, review, execute contracts.</li><li>* Limit review of technical reports and new technologies.</li></ul>
Senior Level Professional	<ul style="list-style-type: none"><li>* Project management.</li><li>* Prepare proposals.</li><li>* Report preparation/ review.</li><li>* Develop and oversee project budget.</li><li>* Data review and analysis.</li><li>* Work plan preparation.</li><li>* Coordinate with agency, client and Subcontractors.</li><li>* Periodic and site inspection.</li><li>* Hydro geologic and contaminate Modeling</li><li>* Equipment specification review, Selection and design.</li><li>* Remediation system installation.</li><li>* Supervise complex remediation activities.</li></ul>

## **ADEQ Approved Procedural Guidelines**

Contaminated soils were removed for safety concerns, the costs for soil removal and disposal are reimbursable.

22. Tank closures are eligible costs under the State Assurance Fund program, if performed as part of corrective action. To be part of corrective action there must be evidence that A known release was reported before the initiation of the tank closure, or release was discovered 60 days following the tank closure. ( This can be supported with the “Notification of Release” report, or within the contents of the “14 days” report or other substantive document.)
23. If expenses are otherwise eligible under the State Assurance Fund program, any line Item expenses under \$300 each and in aggregate, on the prime contractors invoice, will Not require specific documentation. However, the expenses must be identified on the Invoice to insure its eligibility. Line item expenses normally falling into this category Are copy/reproduction costs, telephone charges, mileage and/or travel.
24. If the invoice does not satisfy the site location, written documentation or an affidavit must be obtained from the vendor identifying the location. If this can not be obtained, the applicant or their consultant is required to provide facsimile or an affidavit, followed by a hard copy, confirming the site location.
25. Companies/governmental entities using their own maintenance personnel to conduct remediation may claim actual labor and fringe benefit costs incurred.
26. Cost associated with preparing and advertising for bids are eligible for reimbursement.
27. The Personnel Task Description Guidelines list the appropriate levels of personnel for conducting corrective action activities. Personnel rates claimed above the approved activity rates will be subject to professional reviews on a case by case basis.
28. The Cost Guidelines represent the upper limit of reasonableness. Cost or units exceeding these guidelines, with adequate documentation, would be reimbursable.
29. The technical reviewer can use professional judgement to decide if air travel costs were necessary and/or associated with corrective action.

## **ADEQ Approved Procedural Guidelines**

30. Maximum contractor markups are not to exceed 20%, even when the total invoice price is below the cost guidelines.
31. Supervisory costs of owner/operators to monitor a contractor performing corrective action activities are not reimbursable .
32. Reinstallation of electrical wiring, dispensers, pumps, and plumbing requiring removal for corrective action is reimbursable.
33. Landscaping for purposes of replacing trees, shrubs and sod due to excavation or stress caused by contamination is not reimbursable. Landscaping to restore topography and grasses only will be reimbursed.
34. Costs associated with calibration and/or trading of any field/testing equipment is not reimbursable. This cost should be included in the cost to rent/lease the equipment.
35. Costs associated with vandalism that occurs on site during corrective action/containment and clean up activity are not reimbursable.
36. Costs associated with the preparation of a reimbursement application appeal are not reimbursable, except costs associated with gathering additional supporting documentation with costs originally denied will be reimbursable.
37. Costs associated with vapor monitoring (leak detection systems) in tank pits are not reimbursable.
38. Costs associated with the preparations of a spill prevention, Control and countermeasures(SPCC) Plan or Preparedness Prevention, and contingency (PPC) plan is not reimbursable.
39. Costs with “overtime” will be considered a reimbursable expense at a rate not to exceed 1.5 times the approved billing rate.
40. If the prime uses of an affiliated laboratory, no markup is allowed.



## II

## ADEQ Approved Cost and Procedural Guidelines

The Technical Review staff uses the following guidelines and procedures. These procedural guidelines review the reasonableness of the costs charged for site characteristics and corrective action of the LUST sites.

### Consultant Guidelines For UST Projects

<u>Cost Category</u>	<u>Cost Guidelines</u>
Principal	\$100 per hour
Senior Level Professional	\$100 per hour
Staff Level Professional	\$75 per hour
Field Level Personnel	\$55 per hour
Administration/Secretarial	\$45 per hour
Clerical	\$30 per hour
Technician Personnel (CADD, Map Production, etc.)	\$55 per hour

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The above guidelines represent the upper portion of a reasonable range for prices and units. These guidelines may be exceeded if the individual facts surrounding an application warrant this decision.

## **SUBCONTRACTOR GUIDELINES FOR UST PROJECTS**

<b><u>Cost Category</u></b>	<b><u>Cost Guidelines</u></b>
Construction Supervisor	\$55 per hour
Skilled Labor	\$40 per hour
General Labor	\$30 per hour
Excavation and Haul (contaminated soil)	\$25 per ton (up to and including 125 miles)
Backfilling (material, equipment, compact, hauling, compaction, labor )	\$25 per ton
Landfill Disposal (contaminated soil)	\$60 per ton
Incineration (Contaminated soil) On-site (includes labor)	\$60 per ton Mob/Demob \$2,500 (includes one-way travel 125 miles)
Off-site (includes waste characterization but not hauling)	\$85 per ton
Mileage (includes passenger, pickup, truck and utility vehicles)	\$0.60
Subcontractor Markup	20 percent

\* The Subcontractor Cost Guidelines include a 20% markup.

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The above guidelines represent the upper portion of a reasonable range for prices and units. These guidelines may be exceeded if the individual facts surrounding an application warrant this decision.

## Analytical Guidelines for UST Projects

<u>Cost Category</u>	<u>Cost Guidelines</u>		
	<u>Soil</u>	<u>Groundwater</u>	<u>Air</u>
TPH by 418.1 AZ/ BLS-181	\$60	\$60	—
TPH by 8015/BLS-191	\$115	\$115	\$110
BTEX by EPA 8020	\$100	—	\$120
BTEX by EPA 8010	\$110	—	\$150
EPA 502.2 Target compounds including BTEX	—	\$250	—
EPA 524 Target Compounds including BTEX	—	\$275	—
BTEX EPA method 503.1 or 502.2	—	\$110	—
Lead by EPA Method 6010	\$40	\$40	—
Mobile Labs (Per hour)	\$220	\$220	—
Mobile Labs Mob/Demob**	\$250	\$250	—

\* Rush Analysis equals a 100% surcharge. Analytical Cost Guidelines include a 20% markup.

\*\* Includes one-way travel of 125 miles and per diem.

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The above guidelines represent the upper portion of a reasonable range for prices and units. These guidelines may be exceeded if the individual facts surrounding an application warrant this decision.

## **Drilling Guidelines for UST Projects**

### **Cost Category**

### **Cost Guidelines**

#### Monitor well installation by Auger Rig

2-inch diameter MW

\$30 per foot

4-inch diameter MW

\$40 per foot

(40 to 140 feet deep)

Mob/Demob \$500 (includes one-way travel of 125 miles)

#### Monitor Well Installation by Air Rotary Rig

2-inch diameter MW

\$50 per foot

4-inch diameter MW

\$60 per foot

6-inch diameter MW

\$70 per foot

Mob/Demob \$700 (includes one-way travel of 125 miles)

#### Monitor Well Installation by Rotosonic

2-inch diameter MW

\$60 per foot

4-inch diameter MW

\$70 per foot

6-inch diameter MW

\$80 per foot

Mob/Demob \$1,000 (includes one-way travel of 125 miles)

\* Well installation includes drilling, materials, finishing and construction. Drilling Cost Guidelines include a 20% markup.

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The above guidelines represent the upper portion of a reasonable range for prices and units. These guidelines may be exceeded if the individual facts surrounding an application warrant this decision.

## **Drilling Guidelines for UST Projects**

### **Cost Category**

### **Cost Guidelines**

#### **Monitor Well Installation by Becker Rig**

2-inch diameter MW

\$70 per foot

4-inch diameter MW

\$80 per foot

6-inch diameter MW

\$90 per foot

Mob/Demob \$1,200 (includes one-way travel of 125 miles)

#### **Soil Borings**

Hollow Stem Auger

\$20 per foot

Air Rotary

\$30 per foot

Rotosonic

\$40 per foot

Becker

\$50 per foot

#### **Drill rig and crew**

\$185 per hour Hollow Stem Auger

\$225 per hour Air Rotary

\$275 per hour Rotosonic

\$300 per hour (Becker Rig)

#### **Well Abandonment**

4-inch MW or less

\$8 per foot

Greater than 4-inch MW

\$12 per foot

#### **Soil Boring - Grouting, Patch**

6-inch diameter or less

\$5 per foot

Greater than 6-inch diameter

\$7 per foot

\* Well installation includes drilling, materials, finishing and construction. Drilling Cost Guidelines include a 20% markup.

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The above guidelines represent the upper portion of a reasonable range for prices and units. These guidelines may be exceeded if the individual facts surrounding an application warrant

## Personnel Task Description

### Labor Category

### Authorized Tasks

Principal

- \* Directs professional staff.
- \* Serve as technical expert or coordinator of large or technically challenging projects.
- \* Provide final review of project documents that legally bind the company.
- \* Negotiate, review, execute contracts.
- \* Limit review of technical reports and new technologies.

Senior Level Professional

- \* Project management.
- \* Prepare proposals.
- \* Final Report preparation/ review.
- \* Develop and oversee project budget.
- \* Work plan preparation.
- \* Coordinate with agency, client and Subcontractors.
- \* Periodic and site inspection.
- \* Hydro geologic and contaminate Modeling
- \* Equipment specification review. Supervise complex remediation activities.

Project Level

- \* Field work preparation and planning.
- \* Report preparation and review.
- \* Data review and analysis.
- \* Equipment selection and design.
- \* Supervise UST, soil and ground water remediation activities.

## Personnel Task Description

### Labor Category

### Authorized Tasks

Staff Level

- \* Report preparation
- \* Remediation system installation and maintenance.
- \* Site reconnaissance and mapping.
- \* Get site access.
- \* Installation of soil boring and monitoring wells.
- \* Supervise UST removal and soil removal and other on-site remediation activities.
- \* Waste characterization. Help in modeling and data analysis.

Field Level

- \* Groundwater monitoring.
- \* Well development.
- \* Free product removal.
- \* Installation of soil borings and monitoring wells.
- \* Limited subcontractor supervision.
- \* Field equipment/sample preparation.
- \* Decontamination.

Administrative/Secretarial

- \* Invoice preparation.
- \* Word processing.
- \* Proofreading/Editing.

Clerical

- \* General clerical duties.
- \* Documentation reproduction.
- \* Report binding.
- \* Filing.

Technical Personnel

- \* CADD work.
- \* Generate new drawings maps and plans system/equipment operation.
- \* Welding.
- \* Electrician.

## **ADEQ Approved Procedural Guidelines**

1. If the tank tightness tank results confirm a suspected release but are not provided with the technical report, the costs of tightness test will not be reimbursed.
2. If documentation of free product disposal is not provided, free product disposal will not be reimbursed unless adequate documentation is supplied by the owner/operator.
3. Soil borings and/or wells that are not adequately placed for the delineation of the extent of soil or groundwater contamination are not reimbursable.
4. All soil borings are not associated with sampling or well construction are not reimbursable.
5. Drilling and associated costs will not be reimbursed if ADWR permits are not obtained for monitoring wells, recovery wells or soil borings over 100'.
6. If monitoring wells and/or soil borings are not documented in the ADEQ file, the cost associated with the monitoring wells and/or soil borings are not reimbursable.
7. If the amount of soil excavated as reported in the technical documents varies by 25% or more with the amounts of soil documented with transportation manifest, then the lower of the two numbers will be used to determine reimbursement of the transportation and excavation costs.
8. The amount of soil documented by transportation manifests varies by 10% or more by the amount of soil documented by burn certificates and landfill receipts, then the lower of the two numbers will be used to determine reimbursements and disposal costs.
9. If transportation manifests, burn certificates or landfill receipts are not documented, associated costs would not be reimbursable. The associated costs include, but are not limited to , excavation, hauling and disposal costs.
10. If rush charges to the laboratory analysis are not justified in the technical documentation, the extra charge is not reimbursable.
11. If sampling and analysis were conducted as part of a tank closure and a release was documented in the initial site characterization report, then the sampling and analysis costs are reimbursable.



12. Treatment and disposal costs are reimbursable only when the necessary permits have been obtained.
13. If test methods used to analyze the samples are not appropriate to detect compounds associated with the product released, the laboratory costs will not be reimbursed.
14. If the chain-of-custody forms are not included in the technical reports and are not properly signed by the sampler and an Arizona-licensed laboratory, the laboratory costs, soil boring installation and sample collection associated with the sampling will not be reimbursed.
15. Cost for soil removal and disposal are only reimbursable, if sample results show the soil was contaminated to levels above Arizona Department of Health Services guidelines.
16. If monitoring wells are not constructed such the water table is intercepted by the screened interval at the time of construction, the associated costs will not be reimbursable.
17. If Arizona-Licensed laboratory quality control or quality assurance documentation is not included in the laboratory reports, the laboratory analysis will not be reimbursed.
18. If soil and or water samples analyzed by the laboratory exceed the US EPA holding times, the costs for analysis and sample collection are not reimbursable .
19. If an active Vapor Extraction System (VES) is installed at a LUST site and supporting documentation does not include VES design criteria (such as soil conditions , depth to groundwater, volatility of contaminants), costs associated with VES installation, operation and maintenance are not reimbursable unless confirmation samples show that the system is operational and contributing to site remediation.
20. Costs for incurred for performing corrective actions deemed unacceptable by ADEQ, are not considered reimbursable through the Arizona State Assurance Fund.
21. If no sample results are available that indicate that the soil was contaminated, but a written notice is provided by the fire Marshall that indicates petroleum contaminated soils were removed for safety concerns, the costs for soil removal and disposal are reimbursable .
22. Tank closures are eligible costs under the Arizona State Assurance Fund program if performed as part of corrective action. There must be evidence that a known release was reported before initiation of the tank closure, or a release was discovered 60 days following the tank closure. (This can be supported with the “ Notification of Release” report, or within the contents of “14 days” report or other substantive documentation.)

23. If expenses are otherwise eligible under the Arizona State Assurance Fund program, any line item expenses under \$300 each and in aggregate on the prime contractor's invoice, will not require specific documentation. However, the expenses must be identified on the invoice to insure eligibility. Line item expenses normally falling into this category are copy/ reproduction costs, telephone charges, mileage and/or travel.
24. If the invoice submitted does not identify the site location, written documentation or an affidavit must be obtained from the vendor identifying the location. If this cannot be obtained, the applicant or their consultant is required to confirm the site location by providing a facsimile or an affidavit, followed by a hard copy.
25. Companies/governmental entities using their own maintenance personnel to conduct remediation may claim actual labor and fringe benefit costs incurred.
26. Costs associated with preparing and advertising for bids are eligible for reimbursement.
27. The Personnel Task Description Guidelines list the appropriate levels of personnel for conducting corrective action activities. Personnel rates claimed above the approved activity rates will be subject to professional review on a case by case basis.
28. The cost guidelines represent the upper limit of reasonableness. Costs or units exceeding these guidelines, with adequate documentation, would be reimbursable.
29. The technical reviewer can use professional judgement to decide if air travel costs were necessary and/or associated with corrective action.
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31. Supervisory cost of owner/operators to monitor a contractor performing corrective action activities are not reimbursable.
32. Reinstallation of electrical wiring, dispensers, pumps, requiring removal for corrective actions is reimbursable.
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34. Costs associated with calibration and/or training of any field/testing equipment is not reimbursable. This cost should be included in the cost to rent/lease the equipment.
35. Costs associated with vandalism that occurs on site during corrective action or containment and clean up activity are not reimbursable.

36. Costs associated with preparation of a reimbursement application appeal are not reimbursable except costs associated with gathering additional supporting documentation for costs originally denied will be reimbursable.
37. Costs associated with vapor monitoring (leak detection systems ) in tank pits are not reimbursable.
38. Costs associated with preparations with a spill prevention, control and Countermeasures (SPCC) Plan or Preparedness Prevention, and Contingency (PPC) Plan are not reimbursable.
39. Costs associated with “overtime” will be considered a reimbursable expense at a rate not to exceed 1.5 time the approved billing rate.
40. If prime uses an affiliated laboratory, no markup is allowed.
41. When contamination from a release from a UST is discovered as a result of a modified Phase I property transfer assessment (i.e. oil borings, tank tightness test ) or a Phase II subsurface investigation (i.e. soil borings, test pits), sampling activities and associated costs are eligible for reimbursement.
42. Minimum waiting period for conducting groundwater sampling following the installation of a monitoring well is one week, unless otherwise approved by the ADEQ. Costs associated with premature sampling are not reimbursable.